Ripped from the ROUNDUP

Ripped straight from the pages of old Space News Roundups, here's what happened at JSC on this date:

rusty, collapsed and twisted piece of metal with a packed parachute attached was found in Galveston Bay August 24 by the shrimp boat 'Nancy' and the whereabouts of a long lost spacecraft was solved.

The spacecraft was lost May 31, 1962, when the first drop of a boilerplate spacecraft was conducted in the Bay Area. A lanyard that was to have pulled the parachute out of the canister in the spacecraft, as it left the C-119, broke and the 2,150-pound boilerplate Mercury went in a free-fall from 1,500 feet into the mud of Galveston Bay.

A search was conducted for the vehicle but it proved futile because the hulk was apparently buried in the mud out of sight.

ASA Kennedy Space Center last month awarded a contract to modify Launch Complex Pad A for space shuttle operations and to convert a mobile launcher from Apollo to shuttle configuration.

Pad A, which was the launch site for all but one of the Apollo/Saturn V missions and the Skylab space station, will be the launch site of all early space shuttle missions. Pad B will be modified later.

The reshaping of KSC's Complex 39 for its role in the space shuttle era is well underway. Construction of the 4,500-meter-long (15,000 foot), 90meter-wide (300-foot) landing facility to the northwest of the VAB began in April 1974 and paving should be completed by the end of 1975.

ndeavour returned to Kennedy Space Center early Monday, completing the first mission ever to deploy and retrieve two satel-

lites by returning the first ultravacuumgrown thin films and new data about the Sun's corona and the solar wind.

The crew - Commander David Walker, Pilot Ken Cockrell and Mission Specialists Jim Voss, Jim Newman and Mike Gernhardt - deployed and retrieved both the Spartan-201 and the University of Houston-designed Wake Shield Facility.



NASA technology may help preserve ancient Native American languages

By John Ira Petty

Two Native American educators from Montana are looking at technology from NASA's Johnson Space Center in their efforts to preserve and teach their people's vanishing languages.

The JSC Language Education Center is used to help teach astronauts, Russian cosmonauts and others English, Russian, and Japanese, so that they can better work together in the exploration and development of space. The facility is among the largest and most advanced of its kind in the nation.

Vernon Finley and Johnny Arlee are language instructors at Salish Kootenai College on the Flathead Indian Reservation at Pablo in northwestern Montana. Salish and Kootenai are Native American languages spoken mostly by elderly tribal members.

Arlee, 59, said most who still speak the Salish language are elders. Arlee is among the youngest of the fewer than 100 who remain.

He teaches the Salish Cultural Leadership Program. It tries to develop leaders to replace the elders, and that cultural leadership includes being able to pass on the language. "The language is the main part of it," he said.

Finley, 46, teaches Kootenai. He said that while there have been language preservation efforts, they have not pro-

duced many fluent speakers. The visit to JSC had been a kind of verification that they were moving in the right direction, he said. One obstacle they face is that they have to produce many of their own materials, and those used in JSC's language lab provided examples of types of materials they might try to develop.

"Instead of reinventing the wheel," Finley said, "we can look at their materials and say, 'I hadn't thought of that issue." He cited examples such as computer programs and use of various media in language instruction.

Kootenai has even fewer fluent speakers than Salish, Finley said. About the time of first European contact, he said, an estimated 10,000 Kootenai attended one winter camp. Now there are about 2,000 Kootenai, and very few of them are fluent in the language. He said that his band is one of five and numbers about 500. Of them, perhaps 20 speak Kootenai well, and almost all are in their 70s or older.

Tony Vanchu, director of the Language Education Center, said he believes the two visitors had seen technology and methodology that would help them teach and preserve their languages. "I would say it was a very productive visit."

Arlee and Finley gave sample lessons in their languages to teachers at the Language Education Center. Vanchu said those lessons and other contacts with the two "made our teachers think about what we do with our students and how we do it. They have a different set of problems we don't even have to think about."

Lee Snapp, a JSC aeronautical engineer, taught engineering and mathematics at Salish Kootenai College during the 1999-2000 school year under the NASA Administrator's Fellowship Program. He helped host the visit.

The fellowship program focuses on minority institutions. NASA instructors teach for one year, followed by a review. When Snapp returned to JSC for his review, he invited Joe McDonald, president of Salish Kootenai College, to come with him. McDonald was impressed with what he saw at the Language Education Center and helped arrange the visit of Finley and Arlee.

NASA/JSC's continuing efforts to transfer benefits of space-related research and development to the private sector are coordinated by Johnson's Office of Technology Transfer and Commercialization.

Johnson Space Center Inspection 2000, November 1 to 3, will showcase space-based technology for representatives of business, government and education who are seeking answers to technical challenges. For more information see http://inspection.jsc.nasa.gov.



NASA JSC 2000e20987 Photo by Robert Markowitz

Tony Vanchu, far right, director of JSC's Language Education Center visits with Vernon Finley, far left, and Johnny Arlee, of Salish Kootenai College.

Firm earns honors for superior performance

ocumentation Data Management Systems Inc., a Houston-based minority-owned business and a major contractor for the Johnson Space Center, recently received an Emerging 10 (E 10) Award in recognition of its significant contributions to its industry and the community.

Founded by President and CEO Vijay Krishen in 1993,

DDMS was one of 10 locally based and minorityowned companies recognized for their success not only in the business arena, but also for their contributions to the minority business community.

Krishen and her staff of more than 15 employees provide data management support for the International Space Station Program. DDMS technologies deliver the contract-required data for all government-furnished equipment and government-furnished data on the program. This data includes information from the U.S. as well as all international organizations participating in the ISS Program. DDMS has supported JSC for more than six years.

"I find NASA the Mount Everest of technical organizations," said Krishen.



"Our employees are thrilled that they work at a place which is looking for the answers to the formation of the universe and life in it."

DDMS' services encompass management information systems, configuration control and documentation management. The company provides engineering support, inventory management systems, ISO 9000 support and consulting services.

The election of the E 10 winners is overseen by the Houston Minority Business Council, which sought nominations from ethnic groups and chambers of commerce throughout Houston. About 125 company applications were submitted for the 10 awards.

Companies must be owned, managed, and controlled by 51 percent or more by one or more minority individuals, be a certified minority business, in business at least three years, and able to demonstrate above average growth in sales or employment.